EFFECTIVE DATE: 05/23/03 EXPIRATION DATE: 3/31/08

(Reissued I03-V-07)

PROCEDURE INSTRUCTION LETTER NO. 106-V-02

FROM: RAY McKINNEY

Administrator for

Coal Mine Safety and Health

SUBJECT: Annual Review of Approved SCSR Storage Plans, Annual Survey of

Ray Me Kinney

Self-Rescue Devices and Investigating and Reporting Problems with

Self-Rescue Devices

<u>Scope</u>

This Procedure Instruction Letter (PIL) applies to all Coal Mine Safety and Health (CMS&H) compliance personnel. Furthermore, this guidance has even greater significance due to the increased numbers of SCSR and storage caches required by the March 9, 2006 Emergency Temporary Standard (ETS) on Emergency Mine Evacuation (71 FR 12252).

<u>Purpose</u>

The purpose of reissuing this procedure instruction letter is to continue guidance for district personnel responsible for: reviewing self-contained self-rescuer (SCSR) storage plans; conducting annual surveys of self-rescue devices; and investigating and reporting problems with self-rescue (SR) devices. This will help ensure the self-rescue devices provided for use at a mine-site are used, located, inspected and maintained in accordance with the regulations.

Background

In May 2003, the Mine Safety and Health Administration's (MSHA) procedures for the inspection of self-rescue devices were reapportioned from MSHA Handbook Number PH00-V-11, Coal Self-Rescuer Inspection Procedures Handbook (Self-Rescuer Handbook) to a series of locations more appropriate to the subject matter. This initial handbook was originally released in October 2000, in response to recommendations from the Office of the Inspector General upon completion of an MSHA requested review of a procurement contract and recall of certain SCSR devices. The incorporated items were subsequently determined to be more properly placed in the general inspection procedures document along with administrative instructions.

This PIL reflects the new locations of the self-rescuer inspection procedures of the Self-Rescuer Handbook into Coal Mine Safety and Health's (CMS&H) General Inspection Procedures Handbook and other accompanying SCSR directives. All of MSHA's required inspection activities will continue to be maintained through the implementation of this PIL and other directives in place of the Self-Rescuer Handbook. The integration of the provisions of the Self-Rescuer Handbook into other MSHA directives remains as set forth in the attachment.

Procedure Instruction

Annual Review of Approved SCSR Storage Plans - Each CMS&H District with underground coal mines that have an MSHA-approved SCSR storage plan, allowing miners to be further than 25 feet from their 1-hour SCSR devices, were required to implement Standard Operating Procedures (SOP's) for conducting a review of every MSHA-approved SCSR storage plan during each 12-month fiscal year period. When necessary, clarification and guidance will be provided by Headquarters. This review should incorporate a mine visit by the reviewer or consultation with the assigned inspector to verify the approved plan parameters.

The person conducting the annual SCSR plans review must determine if there have been any significant changes to the in-mine conditions or the mining process which impact the criteria used by the district in granting approval of the mine operator's SCSR storage plan. In making this determination, the person conducting the review must evaluate:

- 1) the 11 factors outlined in 30 C.F.R. § 75.1714-2(e)(1)(i) through (xi);
- 2) the SCSR Storage Plan Approval Guidelines in Volume V of the MSHA Program Policy Manual;
- 3) MSHA Form 2000-220;
- 4) whether commingling of different types of SCSR's will be permitted and if so, the means for ensuring that all miners are satisfactorily trained on each device;
- 5) any changes that have been made to the MSHA SCSR Storage Plan Approval Guidelines since the plan was approved or last reviewed: and,
- 6) if a separate outby SCSR storage plan is required by the March 9, 2006, Emergency Temporary Standard (ETS).

If the annual review of the approved SCSR storage plan identifies deficiencies, the district must make changes to the approved plan according to the guidelines contained in MSHA's Program Policy Manual (PPM), Volume V, Coal Mines, Interpretation, Application and Guidelines on Enforcement of 30 CFR, General Policies and Programs, V.G-4 Mine Plan Approval Procedures and/or the ETS.

The district procedures must include adequate documentation to ensure that each approved SCSR storage plan is reviewed by the district at no more than a 12-month interval. As a minimum, this documentation should include:

- 1) the mine name;
- 2) mine ID number;
- 3) name of the person(s) who conducted the review;
- 4) date(s)the review was conducted; and
- 5) any identified deficiencies that would necessitate a revision to the approved plan. A copy of this documentation must be filed with the official copy of the approved SCSR storage plan and in the Uniform Mine File.

Annual Survey of Self-Rescue Devices - Each CMS&H District was required to develop SOP's for conducting annual surveys at each underground coal mine to collect information to be used to assess:

- 1) the type and quantity of self-rescue devices deployed in the coal mining industry; and
- 2) any mine conditions that may impact the ability of miners to escape a mine in the event of an emergency.

The type and quantity of self-rescue devices information should be obtained from the operator pursuant to his regulatory requirements under 30 C.F.R. § 75.1714-3(e).

The annual survey period is not critical to the relevance of the data collected. Accordingly, each district should develop its own schedule for the data collection and may stagger the collection for individual mines as long as each mine is on an annual schedule to be completed by the end of each fiscal year. Results of the survey should be recorded on MSHA Form 2000-220, attached, including instructions. Care should be taken to ensure that the information on the completed form and data sheet is legible, accurate, and complete. Each district should have implemented procedures for transmitting the appropriate information from the Self-Rescuer Survey Form, to the District Self-Rescuer survey database at least each quarter, and no later than 15 days following the end of each quarter. The SR survey database is located on the W: \Coal \Special Projects drive. New mines or closed mines should be surveyed or deleted at the time of status change and the information uploaded. A copy of the completed Self-Rescuer Survey Form for each underground coal mine should be filed in the appropriate mine file. The implementation of the March 9, 2006, ETS will necessitate significant changes to relevant data at each mine. Consequently, the accurate completion of MSHA Form 2000-220 annually for every underground coal mine throughout implementation of the change is vitally important to any evaluation of a final rule as related to the use, storage, maintenance, and record keeping of the SCSR units.

Investigating and Reporting Problems with Self-Rescue Devices - Each CMS&H District was required to develop SOP's to provide reasonable assurance that each reported incident involving the use of a self-rescue device is thoroughly investigated. As a minimum, these procedures should include the process the district will follow in:

- 1) investigating reported incidents involving the adequacy of self-rescue devices;
- 2) training enforcement personnel to ensure the inspectors understand the procedures and know what is expected; and
- 3) reporting serious incidents.

Incidents involving the following events are considered significant and should be reported to the Division of Safety at (202) 693-9527, or Technical Support at (202) 693-9473, as soon as practicable:

- 1) An injury to a miner while using a self-rescue device;
- 2) Failure of a self-rescue device to perform as designed; and
- 3) An incident that resulted in a need for a miner(s) to don a self-rescue device to escape to a safe location. Item 3 applies even if there were no reported injuries and the self-rescue devices performed as designed.

<u>Authority</u>

Section 101(b) and Section 317(n) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C., 801(b), 877(n).

Filing Instructions

This letter should be filed behind the tab marked "Procedure Instruction Letters" in the binder entitled Program Handbooks and Procedure Instruction Letters.

Issuing Office and Person

Coal Mine Safety and Health, Division of Safety Terry L. Bentley, Chief, Division of Safety, (202) 693-9521

Contact Office and Persons

Coal Mine Safety and Health, Division of Safety Monty Christo, (202) 693-9527

Distribution

PPM Holders within Coal Mine Safety and Health and Technical Support

Attachment

Attachment

Specific chapters and sections in the Coal Mine Safety and Health Self-Rescuer (SR) Inspection Procedures Handbook, PH00-V-II, have been incorporated into the following MSHA directive:

Chapter 1 of the SR Inspection Procedures Handbook, <u>Annual Review of Approved SCSR Storage Plans</u> is incorporated into SOPs for conducting such reviews. The following includes specific recommendations for the topics currently included in Chapter 1 of the SR Inspection Procedures Handbook:

Section A, <u>Changes In Mining Conditions and/or Mining Process</u> is maintained in the SOP which should require a mine-site visit to check plan parameters.

Section B, <u>Requiring Changes To Previously Approved Plans</u>, is replaced with a statement in the PIL requiring such changes to be initiated in accordance with previously established Program Policy.

Section C, <u>Documentation of Annual Plan Review</u>, is to be detailed in the SOP and incorporated into the Uniform Mine File Handbook.

Chapter 2 of the SR Inspection Procedures Handbook, <u>Quarterly Evaluation of Approved Plan Parameters for SCSR Storage Plans</u>, is incorporated into the Coal General Inspections Procedures Handbook. This activity will be incorporated into mandatory regular inspections (AAA). The following includes specific recommendations for the topics currently included in Chapter 2 of the SR Inspection Procedures Handbook:

Section A, **Quarterly Mine-Site Evaluations**, is to be conducted during each mandatory regular inspection at mines with approved SCSR storage plans. Inspection requirements in this section of the SR Inspection Procedures Handbook will be incorporated directly into Chapter 3 of the General Inspections Procedures Handbook.

Section B, <u>Noncompliance Determinations</u>, is duplicative since procedural instruction for enforcement actions on violations of approved SCSR storage plans is detailed in existing Program Policy. Therefore, information contained in this section does not need to be repeated.

Section C, <u>Documentation of Quarterly Plan Evaluation</u>, is to be documented during each mandatory regular inspection at mines with approved SCSR storage plans. Documentation requirements from this section of the SR Inspection Procedures Handbook will be incorporated into Chapter 8 of the General Inspections Procedures Handbook.

Chapter 3 of the SR Inspection Procedures Handbook, <u>Quarterly Physical</u>
<u>Inspection of Self-Rescue Devices</u>, is incorporated into the Coal General Inspections
<u>Procedures Handbook</u>. This activity will be incorporated into mandatory regular inspections. The following includes specific recommendations for the topics currently included in Chapter 3 of the SR Inspection Procedures Handbook:

Section A, <u>Number of Devices To Be Inspected</u>, is replaced by a requirement to inspect a representative number of each type of SR device during each mandatory regular inspection. Instructions are provided for a representative number of each type of SR at the mine but not less than 10%. A higher percentage of devices are to be inspected when worn/carried or machine/equipment mounted.

Section B, <u>Prior To Conducting The Physical Inspection</u>, includes requirements for inspector familiarity with each type of SR device. This is an administrative matter regarding MSHA personnel training and will be addressed in the Administrative Policy and Procedures Manual (APPM).

Section C, <u>Physical Inspection Procedures</u>, is incorporated into Chapter 3 of the General Inspections Procedures Handbook.

Section D, <u>Noncompliance Determinations</u>, is duplicative since procedural instruction for enforcement actions regarding SCSR devices is detailed in existing Program Policy. Therefore, information contained in this section does not need to be repeated.

Section E, <u>Documentation Requirements</u>, is to be included in inspection notes for each mandatory regular inspection. Documentation requirements from this section of the SR Inspection Procedures Handbook will be incorporated into Chapter 8 of the General Inspections Procedures Handbook. Since this documentation will be recorded in the inspector's notes, the Self-Rescuer Data Sheets in Appendix B of the SR Inspection Procedures Handbook are eliminated.

Chapter 4 of the SR Inspection Procedures Handbook, <u>Periodic Monitoring of Self-Rescuer Part 48 Training</u>, is addressed by the incorporation of a provision for discussing donning procedures and for contacting the local training liaison/specialist

regarding SR training issues into Chapter 3 of the General Inspections Procedures Handbook.

Chapter 5 of the SR Inspection Procedures Handbook, <u>Annual Survey of Self-Rescue Devices</u>, is incorporated into SOPs for collecting the data and entering it into the SR Database. The information will be documented on MSHA Form 2000-220 and filed in the Uniform Mine File. The Uniform Mine File Procedure Handbook is revised to include survey documentation.

Chapter 6 of the SR Inspection Procedures Handbook, <u>Self-Rescuer Training for</u> <u>CMS&H Personnel</u> is incorporated into the APPM. This is an internal administrative matter and is addressed in the APPM.

Chapter 7 of the SR Inspection Procedures Handbook, <u>Investigating and Reporting Problems with Self-Rescue Devices</u>, is incorporated into SOPs for investigating and reporting problems involving the use of a SR device.

Chapter 8 of the SR Inspection Procedures Handbook, Long-Term Self-Rescuer Durability Study, is not mentioned in the IG Report and is discontinued. In an effort to obtain more detailed information regarding how well the various SR devices withstand normal in-mine-use conditions, MSHA, in conjunction with NIOSH, developed a Long-Term SR Durability Study. To date, this study has had little impact on the quality assurance effort it was designed to support. Therefore, this durability study, including the material in Appendix C of the SR Inspection Procedures Handbook, is discontinued. However, NIOSH's Long-Term Field Evaluation (LTFE) has shown the most promise and will be an ongoing SR quality assurance program.

 $T: Coal \setminus Safety \setminus Diane \setminus Attachment \ SCSR. doc$

Self-Rescuer Survey Data Form

U.S. Department of LaborMine Safety and Health Administration

MSHA Form 2000-220 (October 2000 Revised)

12.	Are self-rescue devices <u>stored</u> on mining equipment? Y N If Yes, check each appropriate block to identify the type of mining equipment. Further, using Items 9 (a) through (g) above, identify the type of self-rescue devices observed on the mining equipment.					
	Type(s) Of Mining Equipment (a) Continuous Miner (b) Shuttle Car (c) Roof Bolter (d) Scoop Car (e) Longwall Shield (f) Personnel Carrier (g) Locomotive (h) Other: Specify Are Self-Rescue Devices: (i) Secured on the mining equipment (j) Protected from accidental damage (k) Left on equipment between shifts	? Y_	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;		- - -	
13.	What is the <u>average</u> mining height, in	n inches, of t	the primar	y escape	way?	inches.
14.	Using the primary escapeway what is section in the mine to the surface or leading to the surface	oottom of an	emergen	cy escap	e facility? _	feet.
15.	Does the mine provide SCSRs at straprotection to the surface or a safe loc (a) is the location of these SCSRs ap	ation? Chec	k Y N	If ye	s:	
Comments:						

Side 2 of 2

MSHA Form 2000-220 (October 2000 Revised)

Instructions For Completing MSHA Form 2000-220 (October 2000 Revised)

- **Item 1.** Enter the start and end dates of the survey. If the survey took only one day, only one date is needed.
- **Item 2.** Enter the code of the MSHA office that has inspection jurisdiction for the identified mine.
- **Item 3.** Enter AR Number of inspector who conducted the survey.
- **Item 4.** The supervisor assigned inspection responsibility for this mine should review the form for legibility and completeness and then initial this block.
- **Item 5.** Enter the 7-digit Legal ID Number.
- **Item 6.** Enter the Mine Name as shown in the Legal ID.
- **Item 7.** Enter the Company Name as shown in the Legal ID.
- Enter the total number of miners who work underground, including contractor employees; then enter the number by shift in the block corresponding to the appropriate shift, and enter the starting and quitting time of each shift. Items (a), (b), and (c) should be completed for all mines that do not work a staggered, overlapping, or extended shift, even if coal is produced on only one or two shifts. If the mine works a staggered, overlapping, or extended shift, only item (d) should be checked. Enter the maximum number of miners underground at any given time, including contractor employees, and the average length of the shift in hours. Item (e) pertains to scheduled production shifts only and should be completed for all mines by placing a check after the appropriate day(s) of the week.
- Item 9. Enter the quantity of each type of self-rescue device provided for use at a mine. Item (g) should only be completed if a mine is using a self-rescue device that is not identified on the list of approved devices.
- **Item 10.** Check the appropriate response: either Yes or No.
- Check the appropriate response: either Yes or No. If the mine has an approved plan but the plan is not in effect, the No block should be checked. If the Yes block is checked, enter the travel distance, in feet, from the furthermost face to the section storage cache in item (a). If needed, use the time, height, and distance chart in the Program Policy Manual, under 75.1714-2, to convert travel time to feet.

Instructions For Completing MSHA Form 2000-220 (August 2000)

Check the appropriate response: either Yes or No. This applies to all types of self-rescue devices. If an inspector observes any self-rescue device being stored on any type of mining equipment, the Yes block should be checked and Item 12 completed as follows:

Check the appropriate block, Items (a) through (h), to identify the type(s) of mining equipment the self-rescue devices were found on.

Identify the type(s) of self-rescue devices found on the mining equipment by entering the appropriate letter from Item 9 (a) through (g) after the type of mining equipment. If a self-rescuer is being stored on a piece of mining equipment that is not identified by name, Item (h) should be completed, specifying the type of affected mining equipment.

Check the appropriate Yes or No box for Items (i); (j); and (k).

- Enter the <u>average</u> mining height in inches for the primary escapeway. Where the mining height varies significantly, the inspector should figure the overall average mining height in inches and enter only one figure.
- Enter the total distance in feet from the deepest working section in the mine by following the primary escape route to the surface. If the miners cannot exit to the surface via the primary escape route, the inspector should enter the distance to the bottom of the emergency escape facility.
- If a mine operator provides any SCSR devices at strategic locations for the purpose of providing protection to the surface or to a safe location, the <u>Yes</u> block should be checked. This applies to SCSR devices other than those located in the section storage cache as specified in the approved SCSR storage plan allowing miners to be more than 25 feet from their one-hour SCSR. If the <u>Yes</u> block is checked, the inspector should determine if the District Manager has approved the location of these devices and check the appropriate block for item (a) Yes or No.

The data on MSHA Form 2000-220 will be entered in a District Self-Rescuer Survey Database. Accordingly, it is essential that all appropriate items be completed and that the information be legible and accurate, as determined at the time of the inspection. Copies of the form should be:

- 1. maintained with the completed inspection report; and
- 2. filed in the Uniform Mine File Notebook for the affected mine behind the tab marked Fire Fighting and Evacuation.